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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,341	04/09/2001	Donald Craig Foster	M-9950 US	1350

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EXAMINER

DINH, TUAN T

ART UNIT PAPER NUMBER

2827

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/829,341

Applicant(s)

FOSTER, DONALD CRAIG

Examiner

Tuan T Dinh

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 33-50 is/are pending in the application.
- 4a) Of the above claim(s) 3,8-12 and 39-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,13,14 and 33-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 08 April 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicant's election without traverse of Embodiment III (figure 3B, claims 1-2, 4-7, 13-14, 33-36, 38-41, and 46-47) in Paper No. 10 is acknowledged.

Claims 39-41 and 46-47 do not read on Embodiment III (figure 3B) because limitations " wherein a first end of at least some of the internal leads is exposed through a surface of means for encapsulating" claim 39, lines 8-9, and "internal leads having at least first ends exposed through the enclosure" claim 40, line 4. The limitations do not teach at all within Embodiment III. therefore, claims 39-41 and 46-47 are withdrawn from further consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-7, 13-14, 33-36, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Liang et al. (references cited by applicant).

As to claim 1, Liang discloses a semiconductor die package (10, column 3, line 32) as shown in figures 1-3 comprising:

conductive outer leads (20, column 3, lines 43-44) having first ends extending outside the package and second ends extending toward the interior of the package (see figure 1);

conductive inner leads (26, column 3, line 66) having first ends extending to and electrically accessible through a first surface (upper surface of pad 16) of the package; and

a first die (22, column 3, line 36) electrically connected to the inner and outer leads.

As to claims 2 and 38, Liang discloses the package (10) as shown in figures 1-3 wherein the second ends of the outer leads do not extend beyond the first ends of the inner leads (see figure 1).

As to claim 4, Liang discloses the package (10) as shown in figures 1-2 wherein the first surface is a bottom surface.

As to claim 5, Liang discloses a semiconductor die package as shown in figure 1 further comprising a printed circuit board (14) electrically coupled to the outer and inner leads.

As to claim 6, Liang discloses the package as shown in figure 2 the first ends of the inner leads (26) are approximately co-planar with the first ends of the outer leads (20).

As to claim 7, Liang discloses the package as shown in figure 2 wherein the first die (22) is positioned above the inner leads (26).

As to claim 13, Liang discloses the package as shown in figures 1-2 wherein the inner leads (26) further comprise an interior portion (wire 40) electrically accessible through the first surface, and wherein the die is further electrically coupled to the interior portion.

As to claim 14, Liang discloses the package as shown in figures 1-2 wherein the interior portion and the first ends of the inner leads and the first ends of the outer leads are electrically coupled to a printed circuit board (14).

As to claim 33, Liang discloses the package as shown in figures 1-2 wherein the conductive inner leads are formed from an internal paddle area (16, column 3, line 34).

As to claim 34, Liang discloses the package as shown in figures 1-2 further comprising means for (32, column 4, line 16) securing and electrically isolating the conductive inner leads.

As to claim 35, Liang discloses the package as shown in figures 1-2 wherein the first die (22) is attached to the internal paddle area (16).

As to claim 36, Liang discloses the package as shown in figures 1-2 wherein the first ends of the inner leads are closer to the die than the first ends of the outer leads.

Conclusion


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. West, Horita et al., and Lee disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TD
June 15, 2002



KAMAND CUNEO
PRIMARY EXAMINER